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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,841	01/30/2004	Roman Radon	P24668	2980

7055 7590 04/05/2006

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

IP, SIKYIN

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary	Application No.	Applicant(s)	
	10/767,841	RADON, ROMAN	
	Examiner	Art Unit	
	Sikyin Ip	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/5/05;1/13/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9,10,13,15,21 and 23-41 is/are rejected.
- 7) ☒ Claim(s) 6-8,11,12,14,16-20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/05/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The terminal disclaimer filed on April 15, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USP 6761777 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 37, 38, 40, and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The paragraphs [0017] and [0021] and claims 1, 2, 5, 9, and 11 (see remarks filed January 13, 2006) relied on by applicant do not support open range of Mn as claimed in said new claims.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, 9, 13, 15, 21, and 23-24 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 5194221 to Culling (col. 3, lines 50-65, composition; col. 4, lines 10-25, austenitic structure; col. 4, line 56 – col. 5, line 23, N solubility and FCC structure).

Claims 1-5, 9-10, 13, 15, 21, 23-28, and 31-41 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4793875 to Larson (col. 2, lines 30-36, composition; col. 3, lines 25-51, N solubility; and lines 65-68, carbide and nitrides).

Claims 1-5, 9, 13, 15, 21, and 23-24 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4487630 (abstract, valve part; Table 1 in col. 3, composition; and col. 3, lines 37-49, chromium carbide and nitride)

Cited references disclose the features including the claimed compositions, austenitic FCC matrix, carbides, nitrides, and N solubility. Therefore, when prior art compounds essentially about "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products in the expectation that compounds similar in structure will have similar properties. In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See In re May, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and In re Hoch, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166

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USPQ 406, 409 (1970). As stated in *In re Peterson*, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that “A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art”. Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. As stated in *In re Peterson*, 65 USPQ2d 1379, 1382 (CAFC 2003), that “A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art.” Also see MPEP § 2131.03 and § 2123.

With respect to the recited relationship of claimed elements and PREN which would have been inherently satisfied by the alloy compositions of cited references since the elements and contents are overlapped.

With respect to alloying elements such as Mn content in claim 1 that Culling teaches 4 wt.% which is read on claimed “about 4.5 wt.%” because of the wording “about”. Moreover, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences

between the properties of the claimed compound and the prior art compound. Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Allowable Subject Matter

Claims 6-8, 11-12, 14, 16-20, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed October 5, 2005 have been fully considered but they are not persuasive.

Applicant argues that Culling discloses about 4 wt.% Mn which is outside the claimed "about 4.5 wt.% Mn". "About 4 wt.%" from Culling reads on "about 4.5 wt.%". The wording "about" does not require to be exactly same. See *In re Preda*, 159 USPQ 342 and *In re Ayers*, 154 F.2d 182, 69 USPQ 109 (CCPA 1946). Furthermore, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. Hoch, 428 F.2d 1343-

44, 166 USPQ 406 at 409. Moreover, it is well settled that the teaching of a reference is not limited to preferred embodiments. All disclosures of prior art, including unpreferred embodiments, must be considered in determining obviousness. *Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065, 1068, 44 USPQ2d 1336, 1339 (Fed. Cir. 1997) (error to construe prior art disclosure as limited to the preferred embodiment). MPEP §2123.

Applicant's argument in page 17 of instant remarks is noted. But, present invention compositions 7-9 in Table 1 of instant specification are found inconsistent with instant claim 1, for example. The scope of the showing must be commensurate with the scope of the claims. MPEP § 716.02(d) and *In re Tiffin*, 448 F.2d 791, 792 (Fed. Cir. 1971)

Applicant's argument in page 18, first full paragraph of instant remarks is noted. The examiner reiterates the reason as set forth in last paragraph of 103 rejection above "With respect to alloying elements such as Mn content in claim 1 that Culling teaches 4 wt.% which is read on claimed "about 4.5 wt.%" because of the wording "about". Moreover, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences

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between the properties of the claimed compound and the prior art compound. Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.”

Applicant's argument in page 18, last paragraph of instant remarks is noted. But, none of instant claims limits crystal structure to consist of austenitic structure. Furthermore, “matrix” merely means binding material.

Applicant's argument in page 19 of instant remarks is noted. First, instant claims are mainly composition claims. Therefore, how the austenitic structure formed is immaterial. See *In re Bridgeford*, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113. Second, the instant claimed “austenite matrix” does not define percentage of the austenite. Matrix merely means surrounding material.

Applicant's calculation in pages 20-21 of instant remarks is noted. However, instant claim 1 composition, for example, is overlapped by composition disclosed in col. 2, lines 31-38 of Larson. The difference between 1.4 and 1.5 is less than 7%. Moreover, there is no evidence on record that the claimed value 1.5 or higher is critical.

Applicant's argument with respect to Crook is noted. But examiner reiterates response set forth above that 5 wt.% is “about 4 wt.%”. Moreover, instant claim 1, for example, recites the total amount of Ni+Co is up to about 25 wt.% which is also overlapped by Crook.

Conclusion

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

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Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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ART UNIT 1742

S. Ip
April 2, 2006